

SYNCHRONOUS UPDATING OF DYNAMIC INTERACTIVE APPLICATIONS

ABSTRACT OF THE DISCLOSURE

An automation server interfaces with broadcast scheduling systems of various types to automatically synchronize the behavior of interactive applications relative to various broadcast programs, such as television shows and commercials, so as to maintain the appropriate interactive application for whatever broadcast program is airing. This allows for television shows which have an associated interactive application, but which are segmented by commercials (which may have their own interactive applications) to have their interactive application displayed while the television show is on, but not during commercials, while maintaining any state information that has been created during execution of the interactive application. The automation server includes multiple channel interfaces, each having a translator and an event manager. The translator translates native control signals from the scheduling system into a fixed set of atomic commands which represent the lifecycle behavior of a broadcast program. The event manager receives these atomic commands and uses them to determine the appropriate state for any interactive application that is associated with the broadcast program. The event manager transmits commands to a broadcast server which directly manages the interactive applications by transmitting code, data, and commands to broadcast receivers that controls the execution of the interactive applications in response to the event manager's commands.